



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0539; Directorate Identifier 2012-NM-145-AD; Amendment 39-17616; AD 2013-20-10]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** We are superseding airworthiness directive (AD) 2000-12-11, for certain Model A300 B4-600 and Model A300 B4-600R series airplanes. AD 2000-12-11 required repetitive inspections to detect cracks in the bolt holes inboard and outboard of rib 9 on the bottom booms of the front and rear wing spars, and repair if necessary. This new AD reduces the initial inspection compliance time and repetitive inspection interval. This AD was prompted by a fleet survey and an updated fatigue and damage tolerance analysis indicating a high risk for fatigue cracking on the front and rear spar bottom booms. We are issuing this AD to detect and correct fatigue cracks in the bolt holes of the wing spars, which could result in reduced structural integrity of a wing spar.

**DATES:** This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may examine the AD docket on the Internet at

<http://www.regulations.gov/#!docketDetail;D=FAA-2013-0539>; or in person at the U.S.

Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Airbus SAS – EAW (Airworthiness Office), 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com);

Internet <http://www.airbus.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

FOR FURTHER INFORMATION CONTACT: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: (425) 227-2125; fax: (425) 227-1149.

#### **SUPPLEMENTARY INFORMATION:**

##### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. The NPRM published in the Federal Register on July 3, 2013 (78 FR 40069), and proposed to supersede

AD 2000-12-11, Amendment 39-11789 (65 FR 37853, June 19, 2000). The NPRM proposed to correct an unsafe condition for the specified products.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2012-0138, dated July 26, 2012 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Full fatigue tests carried out by the manufacturer revealed crack initiation from the bolts holes at inboard and outboard of rib 9, on the front and rear spar bottom booms. Similar cracks at the same area were reported by A300-600 aeroplane operators.

This condition, if not detected and corrected, could affect the structural integrity of the aeroplane.

To address this unsafe condition, [Direction Générale de l’Aviation Civile] DGAC France issued AD 94-208-169(B)R2 ([http://ad.easa.europa.eu/blob/19942082tb\\_superseded.pdf/AD\\_F-1994-208-169R2\\_2](http://ad.easa.europa.eu/blob/19942082tb_superseded.pdf/AD_F-1994-208-169R2_2)) [which corresponds to FAA AD 95-07-05, Amendment 39-9187 (60 FR 17990, April 10, 1995)] to require an ultrasonic inspection of holes inboard and outboard of rib 9 on the front and rear spar bottom booms on Left Hand and Right Hand wings.

Since that [DGAC] AD was issued, a fleet survey and updated Fatigue and Damage Tolerance analysis have been performed in order to substantiate the second A300-600 Extended Service Goal (ESG2) exercise. The results of these analyses have shown that the risk for these aeroplanes is higher than initially determined and that, consequently, the inspection threshold and interval must be reduced to allow timely detection of cracks and the accomplishment of an applicable corrective action [and related

investigativeaction].

For the reasons explained above, this new [EASA] AD retains the requirements of DGAC France AD 94-208-169(B)R2, which is superseded, and requires the accomplishment instructions within the new thresholds and intervals specified in Revision 04 of Airbus Mandatory Service Bulletin (SB) A300-57-6037 [dated February 24, 2011].

The related investigative action includes doing inspections for cracking. The corrective actions include oversizing holes and installing new fasteners, and for certain conditions, contacting the FAA or EASA (or its delegated agent) for instructions. You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov/#!documentDetail;D=FAA-2013-0539-0002>.

## **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (78 FR 40069, July 3, 2013) or on the determination of the cost to the public.

## **Conclusion**

We reviewed the available data and determined that air safety and the public interest require adopting this AD as proposed – except for minor editorial changes and re-formatting of the estimates cost data. The estimated cost data has not been changed. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (78 FR 40069, July 3, 2013) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (78 FR 40069, July 3, 2013).

### **Costs of Compliance**

We estimate that this AD affects 29 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

<b>Estimated costs</b>				
<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspection [new action]	18 work-hours X \$85 per hour = \$1,530 [per inspection cycle]	\$0	\$1,530 [per inspection cycle]	\$44,370 [per inspection cycle]

We have received no definitive data that would enable us to provide cost estimates for the on-condition work-hours specified in this AD. The on-condition parts cost estimate is \$2,874.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2013-0539>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the MCAI, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2000-12-11, Amendment 39-11789 (65 FR 37853, June 19, 2000), and adding the following new AD:

**2013-20-10 Airbus:** Amendment 39-17616. Docket No. FAA-2013-0539; Directorate Identifier 2012-NM-145-AD.

#### **(a) Effective Date**

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD supersedes AD 2000-12-11, Amendment 39-11789 (65 FR 37853, June 19, 2000).



**(c) Applicability**

This AD applies to Airbus Model A300 B4-601, B4-603, B4-620, B4-622, B4-605R, and B4-622R airplanes; certificated in any category; all manufacturer serial numbers, except airplanes on which Airbus Modification 10161 has been incorporated in production.

**(d) Subject**

Air Transport Association (ATA) of America Code 57, Wings.

**(e) Reason**

This AD was prompted by a fleet survey and an updated fatigue and damage tolerance analysis indicating a high risk for fatigue cracking on the front and rear spar bottom booms. We are issuing this AD to detect and correct fatigue cracks in the bolt holes of the wing spars, which could result in reduced structural integrity of a wing spar.

**(f) Compliance**

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

**(g) Repetitive Inspections**

At the applicable time specified in paragraph (g)(1) or (g)(2) of this AD: Perform an ultrasonic inspection to detect fatigue cracking of the bolt holes inboard and outboard of rib 9 on the bottom booms of the front and rear wing spars, in accordance with the Accomplishment Instruction of Airbus Mandatory Service Bulletin A300-57-6037, Revision 04, dated February 24, 2011, except as specified in paragraph (k) of this AD.

Repeat the inspection thereafter at intervals not to exceed the applicable time specified in paragraph (h) of this AD.

(1) For normal range airplanes, at the later of the times in paragraphs (g)(1)(i) and (g)(1)(ii) of this AD.

(i) Within 14,100 flight cycles or 30,400 flight hours since airplane first flight or within 14,100 flight cycles or 30,400 flight hours since airplane modification done as specified in the Accomplishment Instructions of Airbus Service Bulletin A300-57-6039 (which is not incorporated by reference in this AD), whichever occurs first.

(ii) Within 1,600 flight cycles or 3,400 flight hours, whichever occurs first after the effective date of this AD.

(2) For short range airplanes, at the later of the times in paragraphs (g)(2)(i) and (g)(2)(ii) of this AD.

(i) Within 15,200 flight cycles or 22,800 flight hours since airplane first flight, or since airplane modification done as specified in the Accomplishment Instructions of Airbus Service Bulletin A300-57-6039 (which is not incorporated by reference in this AD), whichever occurs first.

(ii) Within 1,700 flight cycles or 2,500 flight hours, whichever occurs first after the effective date of this AD.

**(h) Repetitive Inspection Compliance Times**

At the applicable time specified in paragraph (h)(1) or (h)(2) of this AD, repeat the inspection required by paragraph (g) of this AD.

(1) For normal range airplanes: Repeat the inspection thereafter at intervals not to exceed 3,900 flight cycles or 8,400 flight hours, whichever occurs first.

(2) For short range airplanes: Repeat the inspection thereafter at intervals not to exceed 4,200 flight cycles or 6,300 flight hours, whichever occurs first.

**(i) Corrective Action for Cracking**

If any crack is found during any inspection required by paragraph (g) of this AD: Before further flight, repair the cracking including applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-57-6037, Revision 04, dated February 24, 2011, except as specified in paragraph (k) of this AD. Do related investigative and corrective actions before further flight. Thereafter, repeat the inspection required by paragraph (g) of this AD at intervals not to exceed the applicable time specified in paragraph (h) of this AD. Corrective actions required by this paragraph do not constitute terminating action for the repetitive inspections required by paragraph (h) of this AD.

**(j) Definition of Short Range and Long Range Airplanes**

For purposes of this AD, short range airplanes are those with an average flight time lower than 1.5 flight hours, and normal range airplanes are those with an average flight time equal to or higher than 1.5 flight hours.

**(k) Exception to Service Information**

Where the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-57-6037, Revision 04, dated February 24, 2011, specify contacting Airbus for an approved repair: Before further flight, contact either the Manager, International Branch,

ANM-116, Transport Airplane Directorate, FAA, or the European Aviation Safety Agency (EASA) (or its delegated agent), for instructions and do those instructions.

**(l) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using any of the service bulletins specified in paragraphs (l)(1) through (l)(4) of this AD.

(1) Airbus Mandatory Service Bulletin A300-57-6037, dated August 1, 1994, which was incorporated by reference in AD 2000-12-11, Amendment 39-11789 (65 FR 37853, June 19, 2000).

(2) Airbus Mandatory Service Bulletin A300-57-6037, Revision 01, dated August 31, 1995, which was incorporated by reference in AD 2000-12-11, Amendment 39-11789 (65 FR 37853, June 19, 2000).

(3) Airbus Mandatory Service Bulletin A300-57-6037, Revision 02, dated January 9, 2001, which is not incorporated by reference in this AD.

(4) Airbus Mandatory Service Bulletin A300-57-6037, Revision 03, dated January 11, 2002, which is not incorporated by reference in this AD.

**(m) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In

accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: (425) 227-2125; fax: (425) 227-1149. Information may be emailed to: [9-ANM-116-AMOC-REQUESTS@faa.gov](mailto:9-ANM-116-AMOC-REQUESTS@faa.gov). Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

**(3) AMOCs Approved Previously:** AMOCs approved previously in accordance with AD 2000-12-11, Amendment 39-11789 (65 FR 37853, June 19, 2000), are approved as AMOCs for the corresponding provisions of this AD.

**(n) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information EASA Airworthiness Directive 2012-0138, dated July 26, 2012, for related information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2013-0539-0002>.

(2) Service information identified in this AD that is not incorporated by reference may be obtained at the addresses specified in paragraphs (o)(4) and (o)(5) of this AD.

**(o) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Airbus Mandatory Service Bulletin A300-57-6037, Revision 04, dated February 24, 2011.

(ii) Reserved.

(4) For service information identified in this AD, contact Airbus SAS – EAW (Airworthiness Office), 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com); Internet <http://www.airbus.com>.

(5) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(6) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on September 18, 2013.

Ross Landes,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.